

ALNYLAM PHARMACEUTICALS, INC.

Reported by
MASON MICHAEL

FORM 4

(Statement of Changes in Beneficial Ownership)

Filed 12/22/16 for the Period Ending 12/20/16

Address	300 THIRD STREET CAMBRIDGE, MA 02142
Telephone	(617) 551-8200
CIK	0001178670
Symbol	ALNY
SIC Code	2834 - Pharmaceutical Preparations
Industry	Biotechnology & Medical Research
Sector	Healthcare
Fiscal Year	12/31

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

OMB APPROVAL
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or
Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person *		2. Issuer Name and Ticker or Trading Symbol		5. Relationship of Reporting Person(s) to Issuer (Check all applicable)	
Mason Michael		ALNYLAM PHARMACEUTICALS, INC. [ALNY]		<input type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> X Officer (give title below) <input type="checkbox"/> Other (specify below) VP, Finance and Treasurer	
(Last) (First) (Middle)		3. Date of Earliest Transaction (MM/DD/YYYY)			
300 THIRD STREET		12/20/2016			
(Street)		4. If Amendment, Date Original Filed (MM/DD/YYYY)		6. Individual or Joint/Group Filing (Check Applicable Line)	
CAMBRIDGE, MA 02142				<input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person	
(City) (State) (Zip)					

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Trans. Date	2A. Deemed Execution Date, if any	3. Trans. Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			

Table II - Derivative Securities Beneficially Owned (e.g. , puts, calls, warrants, options, convertible securities)

1. Title of Derivate Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Trans. Date	3A. Deemed Execution Date, if any	4. Trans. Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	6. Date Exercisable and Expiration Date		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V		(A)	(D)	Date Exercisable	Expiration Date					Title
Stock Option (right to buy)	\$42.22	12/20/2016		A		5550 (1)		(2)	12/20/2026	Common Stock	5550	\$0.0	5550	D	

Explanation of Responses:

- (Represents the time-vested portion of the reporting person's 2016 Annual Stock Option award. The reporting person also received an option to purchase 5,550
1) shares of ALNY common stock that will vest upon the achievement of four specific performance conditions, which will be reported on a Form 4 if and when
each performance condition is met and the option vests.
(The stock option vests as to 25% of the shares on the 1st anniversary of the date of the stock option grant and as to an additional 6.25% of the shares each
2) successive three month period thereafter.

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Mason Michael 300 THIRD STREET CAMBRIDGE, MA 02142			VP, Finance and Treasurer	

Signatures

/s/ **Michael P. Mason**

12/22/2016

**Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4(b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.